

ABSTRACT

In an information recording apparatus for recording information onto a recording medium by utilizing a technology in a near-field microscope, the information recording apparatus carries out recording with reliability and density. An optical probe (1) or micro-cantilever (12) utilized in a near-field microscope is used as a recording probe (26). The recording probe (26) at its tip is heated by laser light (28) illumination or heating by an electric heating element to radiate microscopic-region thermal energy through the tip to a recording medium (3). This makes it possible to record microscopically information onto the recording medium (3) that varies in physical properties due to heating. Furthermore, thermal energy is provided to a recording position through an auxiliary heat radiating means thereby enabling recording more positively.